

REMARKS

Claims 1, 2, 6-11, 13, 14, 19 and 20 are pending in the present application, claims 3-5, 12, 15-18 and 21 having been cancelled. Claims 1, 8 and 19 are independent. Reconsideration in view of the following remarks is kindly requested.

Summary of Examiner Interview

Initially, Applicants wish to thank Examiner Vo for his time at the interview of July 7, 2005, the contents of which are summarized below.

Prior to the Interview, Applicants' representative provided discussion points. At the Interview, no agreement could be reached as to original claims 1, 8 and 19; however, the Examiner was receptive to claim amendments and arguments directed to the feature whereby the stored recognition vocabulary could be modified by enabling the user to create a replacement command word in the stored recognition vocabulary to substitute for a stored command word corresponding to the received utterance, where the user's utterance was not recognized due to the user's accent or other user-specific speech feature.

Accordingly, Applicants have amended the independent claims based on this discussion with the Examiner.

Claim Rejections – 35 U.S.C. § 102

Claims 1-4, 7-10 and 14-15 stand rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Zuberec et al. (USP 6,298,324). This rejection is respectfully traversed.

Initially claims 3 and 4 have been cancelled; thus the rejection of these claims is now moot.

Applicant respectfully submits that Zuberec et al. fails to teach or suggest a method of recognizing speech so as to modify a currently active vocabulary, comprising, at least:

dynamically modifying the stored recognition vocabulary based on said comparison to improve recognition accuracy for a subsequently received utterance, wherein said dynamic modifying includes enabling the user to create a replacement command word that is stored in the stored recognition vocabulary as a replacement command word corresponding to the received utterance, where the user's utterance was not recognized due to the user's accent or other user-specific speech feature;

as recited in independent claim 1 and as somewhat similarly recited in independent claim 8.

A purpose of the invention is to modify or customize a preset, stored recognition vocabulary so that a subsequent utterance can be better recognized by the system. Furthermore, the modified stored vocabulary does not change back to a default vocabulary.

Zuberec et al. is directed to a speech recognition system with an operator interface. Keywords are utterances for performing a grammar function to balloon default grammar to include new utterances, and non-keywords perform functions in the application. Referring to Figs. 3 and 7, if an utterance is a keyword, the system temporarily expands its active grammar from default grammar to a ballooned grammar. After the performance of the grammar function in the ballooned grammar, the system returns to default grammar.

Thus in Zuberec et al., the system returns to a default grammar after the performance of the grammar function in the ballooned grammar (Col. 5 Line 38-43). Zuberec et al.'s "updating" of the stored recognition vocabulary is only to offer additional options for the user, instead of improving recognition accuracy for

subsequent utterances which Zuberec et al. does not do. (Col. 5 line 48-50).

Moreover, Zuberec et al. is completely silent as to enabling the user to create a replacement command word that is stored in the stored recognition vocabulary as a replacement command word corresponding to the received utterance, where the user's utterance was not recognized due to the user's accent or other user-specific speech feature. For example, and as described in Example 3 on pages 12-13 of the specification, a speaker-dependent training feature in the client device 200 may be used to allow a user to substitute a different, user-selected and trained, command word for one of the preset command words. For example, the user may train the word "stop" to replace the system-provided "hang up" phrase to improve his/her ability to use the system (See Para. 41 of the present invention). This feature is absent in Zuberec et al., and nothing in the description in Zuberec et al. even remotely teaches or suggests this feature.

Because Zuberec et al. fails to disclose each and every feature of the claimed invention as recited in claims 1 and 8, Zuberec et al. cannot provide a basis for a rejection under 35 U.S.C. §102. Reconsideration and withdrawal of the rejection are respectfully requested. Claims 2-4, 7, 9-10 should be indicated as allowable as they depend from allowable claims 1 and 8. Withdrawal of the rejection is therefore kindly requested.

Claims 19-21 stand rejected as being anticipated by Lewis et al. (USP 6,577,999). This rejection is respectfully traversed.

Initially claim 21 has been cancelled; thus the rejection as to this claim is now moot.

Applicant respectfully submits that Lewis et al. fail to teach or suggest a method of recognition vocabulary on a device having a current vocabulary of preset voice-activated commands, comprising, at least:

receiving, in response to a given preset voice-activated command previously uttered by a user that was not recognized by the device due to the user's accent or other user-specific speech feature, a current utterance from the user that is designated to replace the un-recognized preset voice-activated command in the stored recognition memory; and

dynamically modifying the recognition vocabulary with the received current utterance;

as recited in claim 19.

Lewis et al. is directed to a computer speech dictation system. Referring to Fig. 4, acoustic models from less reliable sources are preferable flagged in block 60 prior to being made available to the speech recognition engine application. The flagged acoustic models are automatically discarded in step 94 if a new model is provided. Referring to Fig. 5A, if an acoustic model is not flagged and a word correction is identified in step 70, the quality metric for the acoustic model is decremented in step 72. In step 82, if the quality metric does not exceed a minimum threshold, the acoustic model is deemed unreliable and is preferable discarded if a more reliable acoustic model is available.

Lewis at best teaches as to when an acoustic model should be updated with an alternative model. However, Lewis is completely silent as to receiving, in response to a given preset voice-activated command previously uttered by a user that was not recognized by the device due to the user's accent or other user-specific speech feature, a current utterance from the user that is designated to replace the un-recognized preset voice-activated command in the stored recognition memory. For

at least this reason, claim 19 defines over Lewis. Withdrawal of the rejection is therefore kindly requested.

Claim Rejections – 35 U.S.C. § 103

Claims 5 and 6 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Zuberec et al; claims 11-12 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Zuberec et al. in view of Hashimoto et al. (USP No. 6298324), and claim 13 has been rejected as being anticipated by Zuberec et al. in view of Scruggs et al. (USP No. 5,732,187). These rejections are respectfully traversed.

Claims 5 and 12 have been canceled, thus the rejection as to these claims is now moot. Claims 6, 11 and 13 should be indicated as allowable at least because they depend from allowable independent claims 1 and 8, and/or on their own merits. Withdrawal of the rejection is therefore kindly requested.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1, 2, 6-11, 13, 14, 19 and 20 in connection with the present application is earnestly solicited.

Pursuant to 37 C.F.R. § 1.17 and § 1.136(a), Applicants respectfully petition for a one (1) month extension of time for filing a response in connection with the present application, and the required fee of \$120.00 is attached.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Matthew J. Lattig at (703) 668-8026 (direct).

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By 

Matthew J. Lattig, Reg. No. 45,274

P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

GDY/MJL/ZBH